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| APPLICATION NO:                              | FILING DATE          | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|----------------------|----------------------|---------------------|------------------|
| 10/670,545                                   | 09/24/2003           | Yuan Che Hsich       | INFN0002            | 5491             |
| 25235 7590 02/09/2007<br>HOGAN & HARTSON LLP |                      |                      | EXAMINER            |                  |
|  | CENTER, SUITE 1500   |                      | KINDRED, ALFORD W   |                  |
| 1200 SEVENTEENTH ST<br>DENVER, CO 80202      |                      |                      | ART UNIT            | PAPER NUMBER     |
|  |                      |                      | 2163                |                  |
|  |                      |                      |                     |                  |
| SHORTENED STATUTOR                           | Y PERIOD OF RESPONSE | MAIL DATE            | DELIVER             | Y MODE           |
| 3 MONTHS                                     |                      | 02/09/2007           | PAPER               |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| •  |  | Application No.  | Applicant(s)  |  |  |  |
|--|--|--|---|--|--|--|
| Office Action Summary  |  | 10/670,545   | HSIEH ET AL.  |  |  |  |
|  |  | Examiner   | Art Unit  |  |  |  |
|  |  | Alford W. Kindred  | 2163  |  |  |  |
| Period fo  | The MAILING DATE of this communication app<br>or Reply   | ears on the cover sheet with the c   | orrespondence address   |  |  |  |
| WHIC<br>- Exter<br>after<br>- If NC<br>- Failu<br>Any  | CHEVER IS LONGER, FROM THE MAILING DA nsions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. It is period for reply is specified above, the maximum statutory period we re to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION  16(a). In no event, however, may a reply be time  rill apply and will expire SIX (6) MONTHS from  cause the application to become ABANDONED | I.  lely filed  the mailing date of this communication.  O (35 U.S.C. § 133). |  |  |  |
| Status   |  |  |   |  |  |  |
| 1)⊠  | Responsive to communication(s) filed on 17 No.   | ovember 2006.  |   |  |  |  |
| •  | This action is <b>FINAL</b> . 2b)⊠ This action is non-final.   |  |   |  |  |  |
| 3)□  | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |  |   |  |  |  |
|  | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  |  |   |  |  |  |
| Dispositi  | on of Claims   |  |   |  |  |  |
| 4)⊠  | 4)⊠ Claim(s) <u>1-17,33-36 and 40-49</u> is/are pending in the application.  |  |   |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.   |  |  |   |  |  |  |
| 5)   | 5) Claim(s) is/are allowed.  |  |   |  |  |  |
| 6)⊠  | Claim(s) <u>1-17,33-36 and 40-49</u> is/are rejected.  | •  |   |  |  |  |
| •  | Claim(s) is/are objected to.   |  |   |  |  |  |
| [_](8  | 8) Claim(s) are subject to restriction and/or election requirement.  |  |   |  |  |  |
| Applicati  | on Papers  |  |   |  |  |  |
| 9)□  | The specification is objected to by the Examiner   | ·.   |   |  |  |  |
| 10)  | The drawing(s) filed on is/are: a) $\square$ acce  | epted or b) $\square$ objected to by the E   | Examiner.   |  |  |  |
|  | Applicant may not request that any objection to the o  | drawing(s) be held in abeyance. See  | 37 CFR 1.85(a).   |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).     |  |  |   |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.                 |  |  |   |  |  |  |
| Priority u   | ınder 35 U.S.C. § 119  |  |   |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: |  |  |   |  |  |  |
|  | 1. Certified copies of the priority documents have been received.  |  |   |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No   |  |  |   |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage                        |  |  |   |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).  |  |  |   |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.                                   |  |  |   |  |  |  |
|  | 4  |  |   |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)                                       |  |  |   |  |  |  |
|  | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)  | 4) [] Interview Summary Paper No(s)/Mail Da  |   |  |  |  |
| 3) 🔲 Inform  | nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date   | 5)  Notice of Informal Pa  |   |  |  |  |

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### **DETAILED ACTION**

1. This action is responsive to communications: Amendment, filed on 11/17/07.

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-17, 33-36, and 40-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer et. al., US# 2004/0199506 A1 in view of Mikurak, US# 20040064351.

As per claims 1, 9 Shaffer et al. teaches "one or more reference records within the reference record databases, each reference record providing an association between business information and spatial data for a specific channel participant" (see paragraphs [0061], [0146], and [0240]) "transaction data related to at least one channel participant . . . accessing one or more candidate reference records using spatial and business data . . ." (see paragraphs [0061] and [0116]) "a spatial matching mechanism for matching a subset of the candidate reference records to the transaction data" (see paragraphs [0061] and [0149] and [0064]). Shaffer et al. does not explicitly teach "a candidate identification . . . more than one candidate reference record from one of the reference record databases . . ." (see paragraph [0222], [1332], and [1790]). It would have been obvious at the time of the invention for one of ordinary skill in the art to have combined the teachings of Shaffer and Mikurak,



because using the steps of "a candidate identification . . . more than one candidate reference record from one of the reference record databases . . .", would have given those skilled in the art an efficient tool to identify candidate data from a variety of associated database in regards to data transaction. This gives users the advantage value of expeditiously determining record data via data from transaction information faster.

As per claim 2, Shaffer et al. teaches "a consumer of the product who receives the product from the distribution channel" (see paragraphs [0064] and [0122]).

As per claims 3-4, Shaffer et al. teaches "a producer of the product who places the product in the distribution channel" (see paragraphs [0046] and [0115]).

As per claim 5, Shaffer et al. teaches "a reseller such as a dealer, agent, branch and the like" (see paragraphs [0122]).

As per claims 6-7, Shaffer et al. teaches "a geo-coding mechanism operable to determine street-level spatial data from the transaction data" (see paragraphs [0061] and [0116]).

As per claim 8, Shaffer et al. teaches "determines location information from the transaction data" (see paragraph [0116]).

As per claims 10-12, Shaffer et al. teaches "a reference identifier identifying the channel participant; a business name; and spatial information with predetermined accuracy" (see paragraphs [0146]-[0149]).

As per claims 13-15, Shaffer et al. teaches "a lexical matching process operable to correlate non-spatial data in the transaction record with non-spatial data in the candidate reference records . . ." (see paragraphs [[0061] and [0116]).

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As per claims 16-17, Shaffer et al. teaches a selection process operable to select a candidate reference record based on the generated score exceed a pre-selected threshold vale . . ." (see paragraphs [0120], [0122] and [0182]).

As per claims 33-34, this claim is rejected on grounds corresponding to the arguments given above for rejected clam 1 and is similarly rejected including the following:

--Shaffer et al. teaches "geo-coding location data within the transaction record to determine a spatial identifier . . ." (see paragraphs [00061] and [0182]).

As per claim 35, this claim is rejected on grounds corresponding to the arguments given above for rejected claims 13-14 and are similarly rejected.

As per claim 36, this claim is rejected on grounds corresponding to the arguments given above for rejected claims 10-11 and are similarly rejected.

As per claims 45-49, these claims are rejected on grounds corresponding to the arguments given above for rejected claims 1-2 and 33 and are similarly rejected.

As per claims 42-44, these claims are rejected on grounds corresponding to the arguments given above for rejected claims 1-4 and 6 and are similarly rejected.

4. Claims 40-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer et.al., US# 2004/0199506 A1 in view of Mikurak, US# 20040064351, and further in view of Underwood, US# 6,523,027.

As per claims 40-41, these claims are rejected on grounds corresponding to the arguments given above for rejected claim 1 and are similarly rejected, Shaffer et al. does not explicitly teach "a learning." Underwood teaches "a learning database" (see fig. 17A i.e. 1704 and col. 14,

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lines 2-30). It would have been obvious at the time of the invention for one of ordinary skill in the art to have combined the teachings of Shaffer and Underwood, because using the steps a Learning database gives those skilled in the art the ability to implement a tracking database (i.e. Learning database) to track and associate transactions in the transaction database environment. This gives users the ability to process transaction data in a database environment faster.

## Response to Arguments

5. Applicant's arguments filed 11/17/06 have been fully considered but they are not persuasive, in part, in view of the new grounds of rejection.

--As per applicant's arguments regarding "Mikurak can only be used as a reference against Applicants' claimed invention for what was presented . . . request that the Examiner provide citations to the detailed support found in one or more of the parent applications . . . ", examiner refers applicant's to the Mikurak's invention as a whole regarding the collaborative order management of business entities dealing with service providers, vender, resellers, etc. as indicated in the continuation in part applications. The concept, as a whole, reads on applicant's claim language regarding candidate records and identification in regards to one or more reference databases.

--As per applicant's argument regarding "None of the references cited . . . addressed the problem of how to handle imprecise input data . . . the use of lexical matching to resolve a set of candidates . . .", examiner disagrees and maintains that Shaffer combined with Mirkurak teaches the handling of imprecise input data and offers a lexical matching element to resolve candidate data. Shaffer teaches the association of business data and spatial data for participants while

Mirkuak teaches the identification of candidates from a plurality of reference record databases and when combined reads on applicant's claim language.

--As per applicant's arguments regarding "how would Shaffer handle an identifier input by a user that was provided with errors . . .", examiner considers Shaffer's teachings of handling the numerous consumer requests by inserting an additional parameter, as well as the "Linkage Key" teaches, to identify transactions, whereas the inserting of the additional parameter detects the indication of an incomplete or erroneous input and therefore reads on applicant's claim language.

--As per applicant's arguments regarding "there is no discussion in these paragraphs of identifying 'more than one reference record' . . . Shaffer is not addressing ambiguities . . . is a precise matching algorithm that is based on indexes . . .", examiner disagrees and maintains that the Shaffer's matching algorithm is not limited to only precise matching, but includes the capacity for error correction as indicated in applicant's claim language. Further, the Shaffer does indicates more than one reference, for instant the teaching of Linkage Key indicating a nearest pizza chain restaurant, reads on applicant's claim language.

--As per applicant's arguments "Shaffer fails to teach or suggest at least the generating and the geo-coding steps . . .", examiner maintains that Shaffer's matching of database via identifiers, includes the location, which corresponds to applicant's geo-coding location, since both deals the location of transaction information.

--As per applicant's arguments regarding "Applicant's could not find teachings . . . with 'greater precision' than the transaction record that that each such record is associate with a spatial identifier . . .", examiner maintains that Shaffer's teachings of identifying the various

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more precise citation is in the instant response.

types of data in a database in paragraph [0061] and [0116] and the reference as a whole. The greater precision element of transaction records corresponds to Shaffer's identifying of various data types based on a precision element in conjunction with transaction records.

--As per applicant's arguments regarding "Underwood does not show learning libraries that are 'operable to hold records that create associations between information within transaction records that could not be automatically matched with reference records' . . . ", examine disagrees and maintains that Underwood's teachings of class libraries combined with fig. 17's teachings of maintaining a record of a page previously accessed, reads on applicant's claim language.

Examiner agrees that the specific citation in Underwood was mischaracterized and therefore a

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### Conclusion

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alford W. Kindred whose telephone number is 571-272-4037. The examiner can normally be reached on Mon-Fri 9:00 am- 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Alford W. Kindred Patent Examiner Tech Ctr. 2100